

Figure 1

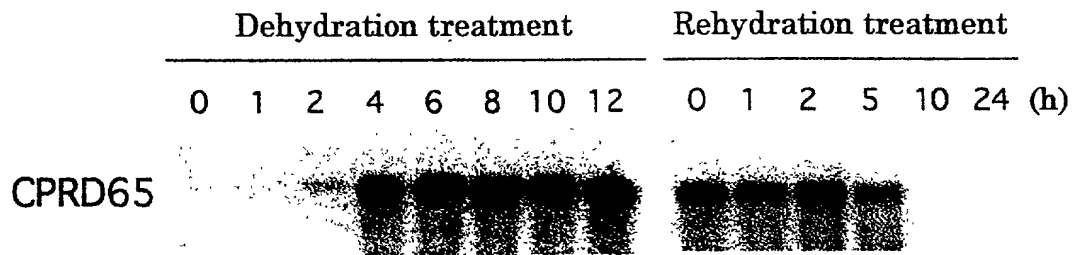


Figure 2

CPRD65	PSSASNTWFNATLSPSPFKDLPSTSSPTNLLPLRKTSSNTITCSLQFLHFPKQYQPTSTSTSTATTITPTIKTTTTITTTTPRETNP	90
VP14	QGLAPPTSVSIHRHLPA-RSRARASNSVRFSR-RAVSSVPPAEC-LDA-PFHK-----PVADLPAPSRKPAAI--AVPGHAAAPRKAEG	79
LeNCED1	ATTTSF--ATNTWIKT-KLSMPSSEKFGFAS-NSISLLKNQHN-RDGLNINS---SLQAPPILHFPKQSSNYQTPKNNTISHPKQEN-	80
CPRD65	LSDTNQPLPQKWNFLQKAATALDLVETALVSHERKPLPMTADPPVQINENFAPVFEHAADQCLPVVQIIPKCIDGVYVRNGANPLYE	180
VP14	-GKKQLNLFQR-AAAAALDAFEEGFVNVLL--ERPHCEPSTADPPVQINENFAPVGERPPVHELPSGRITPPFIDGVYVRNGANPCFDP	164
LeNCED1	-NNSSSSTSKWNLVQKAAAMALDANESALTKELEHPLPMTADPPVQINENFAPVFNPCVCSLPVVGQIPKCVQGVYVRNGANPLFEP	169
CPRD65	VAGHIFDGGGMVHAKFTNGNALSYACRFTEKRLDEKSLGRPVFPKATGELHGHSGIARLLFYARGLGLVDLSKGVANAGLVY	269
VP14	VAGHIFDGGGMVHAKFTNGNALSYACRFTEKRLDEKSLGRPVFPKATGELHGHSGIARLLFYARGLGLVDLSKGVANAGLVY	254
LeNCED1	TAGHIFDGGGMVHAKFTNGNALSYACRFTEKRLDEKSLGRPVFPKATGELHGHSGIARLLFYARGLGLVDLSKGVANAGLVY	258
CPRD65	FNHLLAMSEDDLPYHYRITPNDLITGRNDFEQLNSTIAHPKLDPVGGELALSVDVIKPYLKYPFSPDQKSDVEIPLKEPT	359
VP14	FNHLLAMSEDDLPYHYRVADQGLTVERVDFDGLGCMIAHPKLDPATGELALSVDVIKPYLKYPFSPDQKSDVEIPLKEPT	344
LeNCED1	FNHLLAMSEDDLPYHYKVPTDGLITGSAFDGGLKSTIAHPKLDPVGGELALSVDVIKPYLKYPFSPDQKSDVEIPLKEPT	348
CPRD65	YHDFAITENFVVPDQVVFKLTEMLTGGSPVVDKNGSRFGGLKAKDANAMKMDAPDCFCFHLNNAWEPEETEEVVGSCMTP	449
VP14	YHDFAITENFVVPDQVVFKLQEMLRGGSPVVDKNGSRFGGLKAKDASEMAMDVDCFCFHLNNAWEDEATGEVVGSCMTP	434
LeNCED1	YHDFAITENFVVPDQVVFKLSEMLRGGSPVVDKNGSRFGGLDQAKDGSOLKWEVDCFCFHLNNAWEAEETEEVVGSCMTP	438
CPRD65	ADSIFFNECEELQSVLEIRLNLRTGSTRPIISDAEQ-VLENGMVNRNKLGRKTQFAYLAAEPWPKEGGFAKVDLSGEVKKIYTG	538
VP14	ADSIFFNESDERLESVLEIRLDARTGSTRRAVLPPSQQ-ENLEMGVNRNKLGRSRYAYLAAEPWPKEGGFAKEDLSTGELTKFEYTG	523
LeNCED1	POSIFFNECEELQSVLEIRLNLRTGSTRKSIIENPDEQVLENGMVNRNKLGRKTEYAYLAAEPWPKEGGFAK/NLFTGEVKKIYTG	528
CPRD65	EEKFGGEPFLP-----NGQKEDDGYLLFVHDEKWKSELQVNAQNLKLEASIKLPSRVPPGFHGTFTHSKDLRKDA	612
VP14	EGRFGGEPFLPMDPAAAHPRGEDDGYLLFVHDERAGTSELVWNAADIREAIVOLPSRVPPGFHGTFTIGQLEADA	604
LeNCED1	DNKYGGEPFLPDPD-----NSKEEDDGYLLFVHDEKWKSELQVNAQNLKLEAFVKLPSRVPPGFHGTFTINANDLADA	605

Figure 3

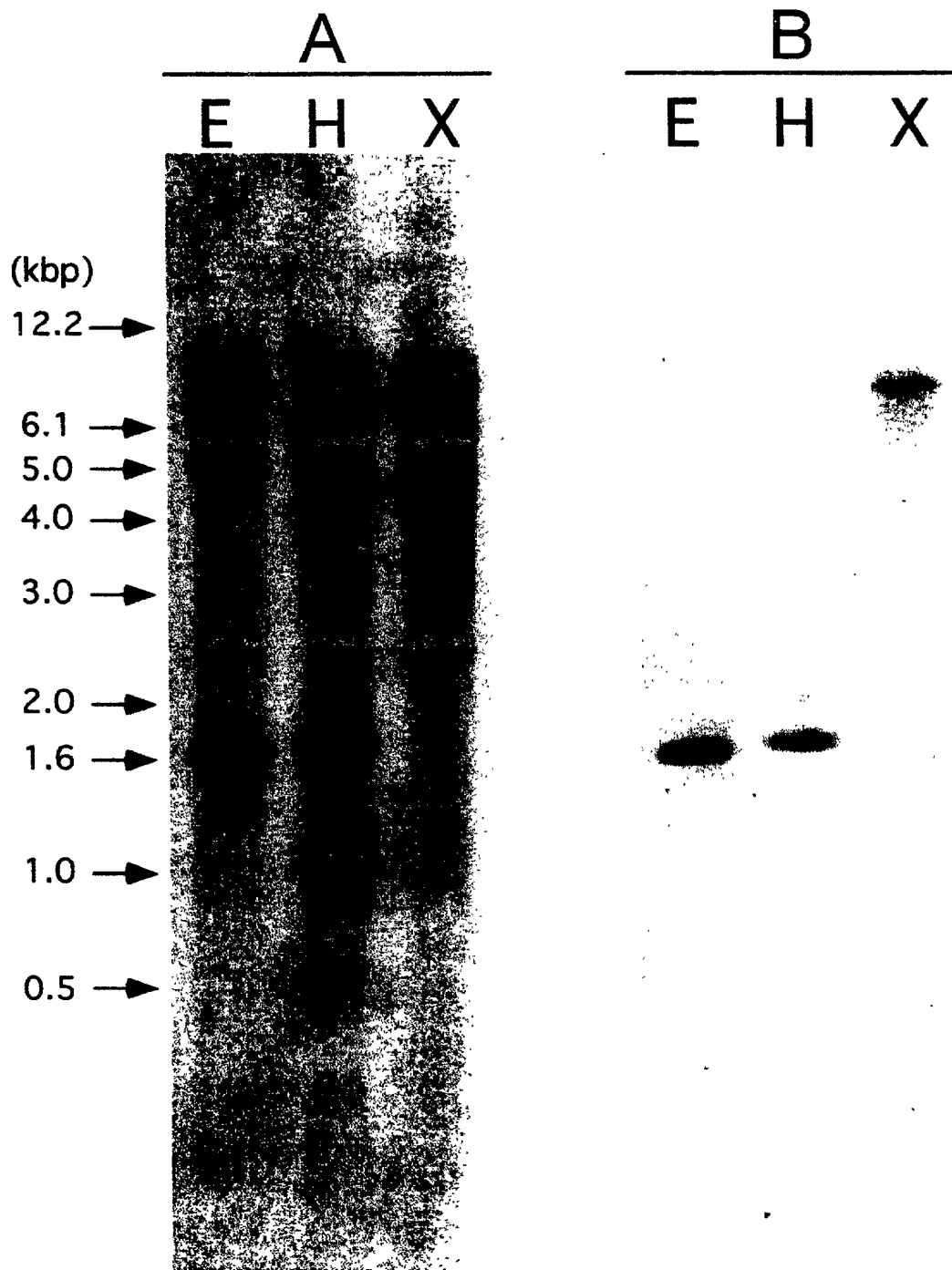
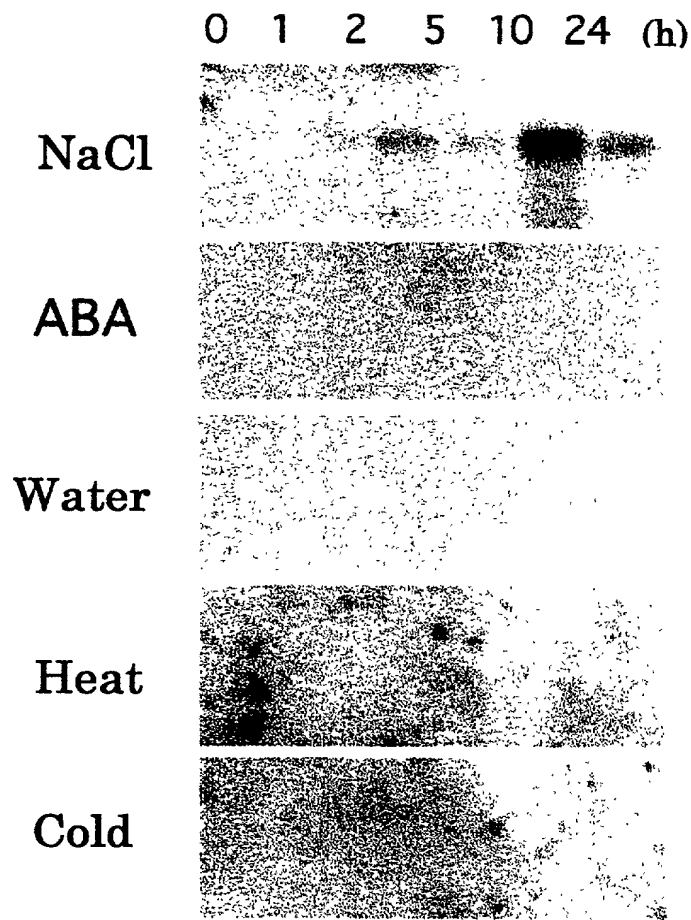


Figure 4

(A)



(B)

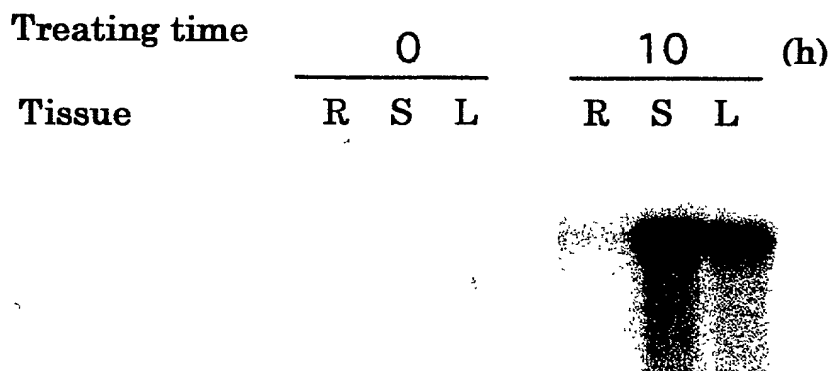
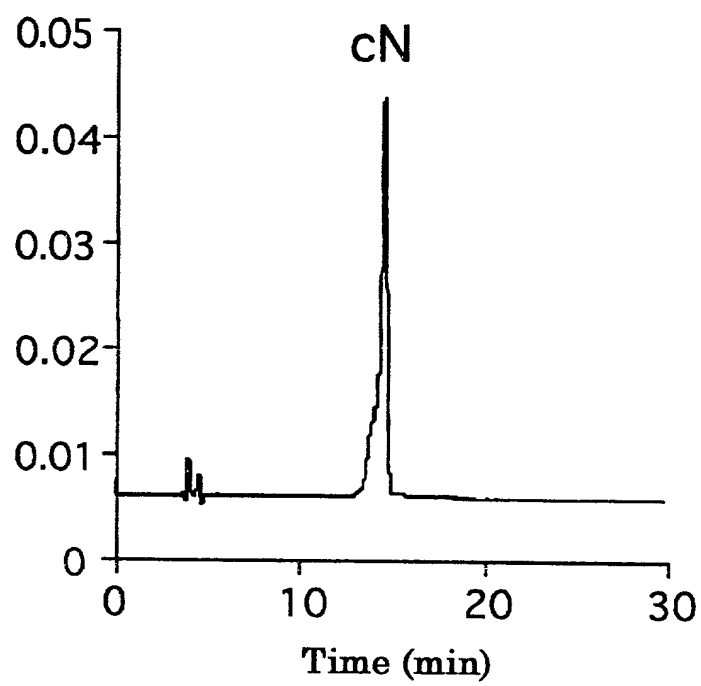


Figure 5

(A)



(B)

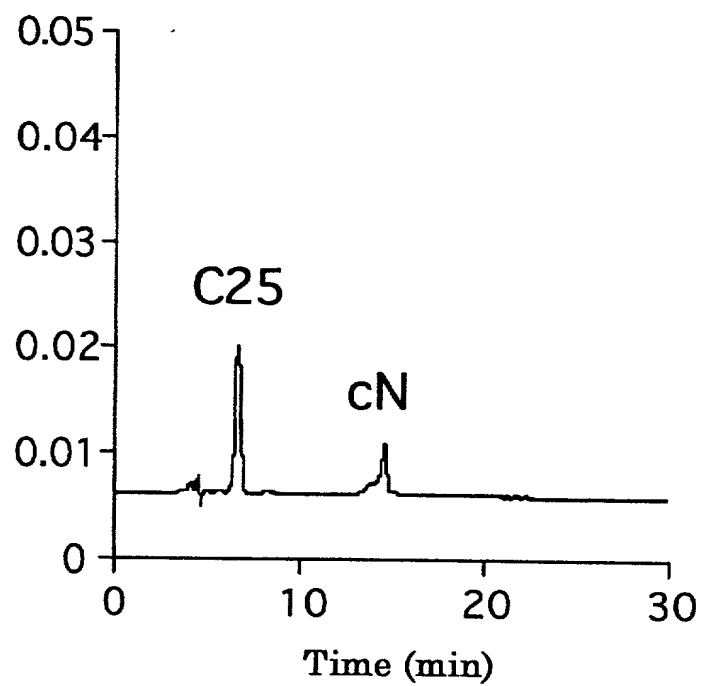
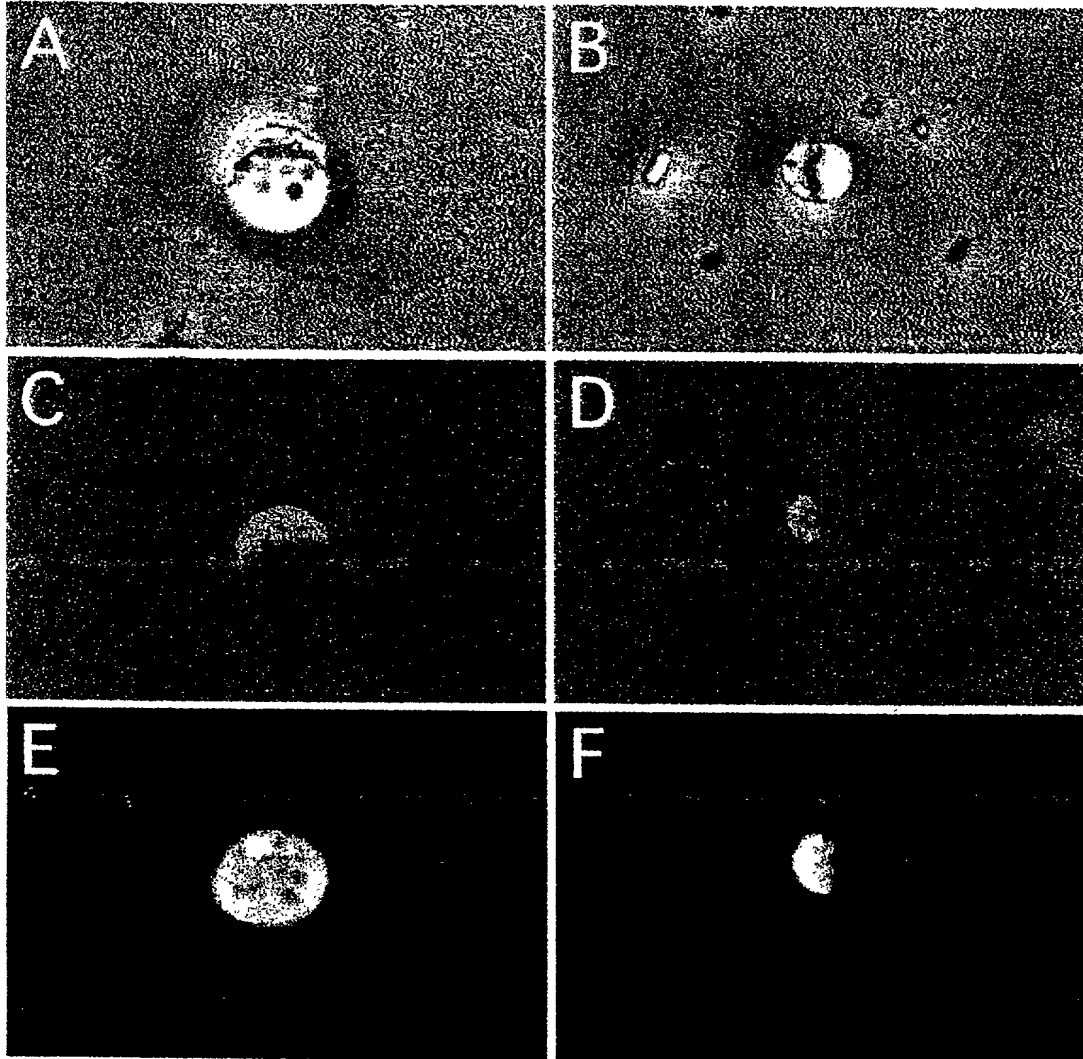


Figure 6



095229-04104
FOUO 6325460

Figure 7

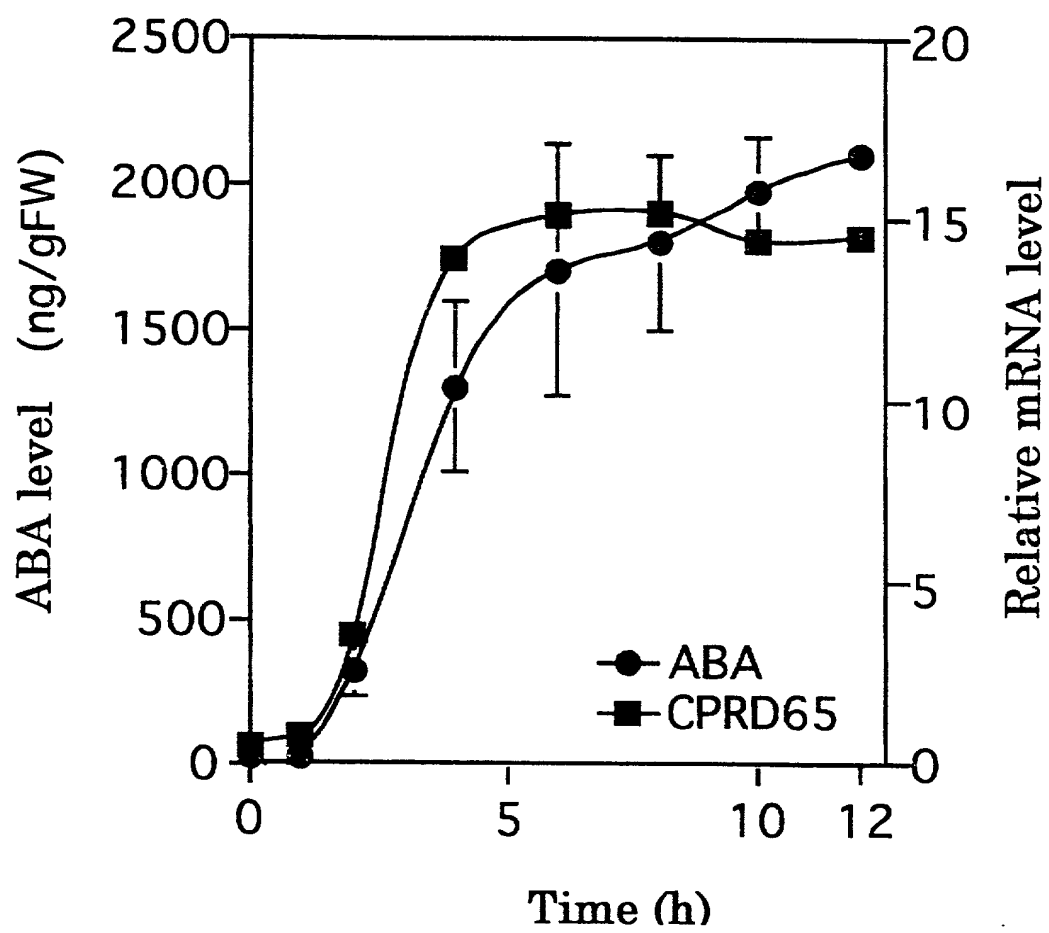


Figure 8

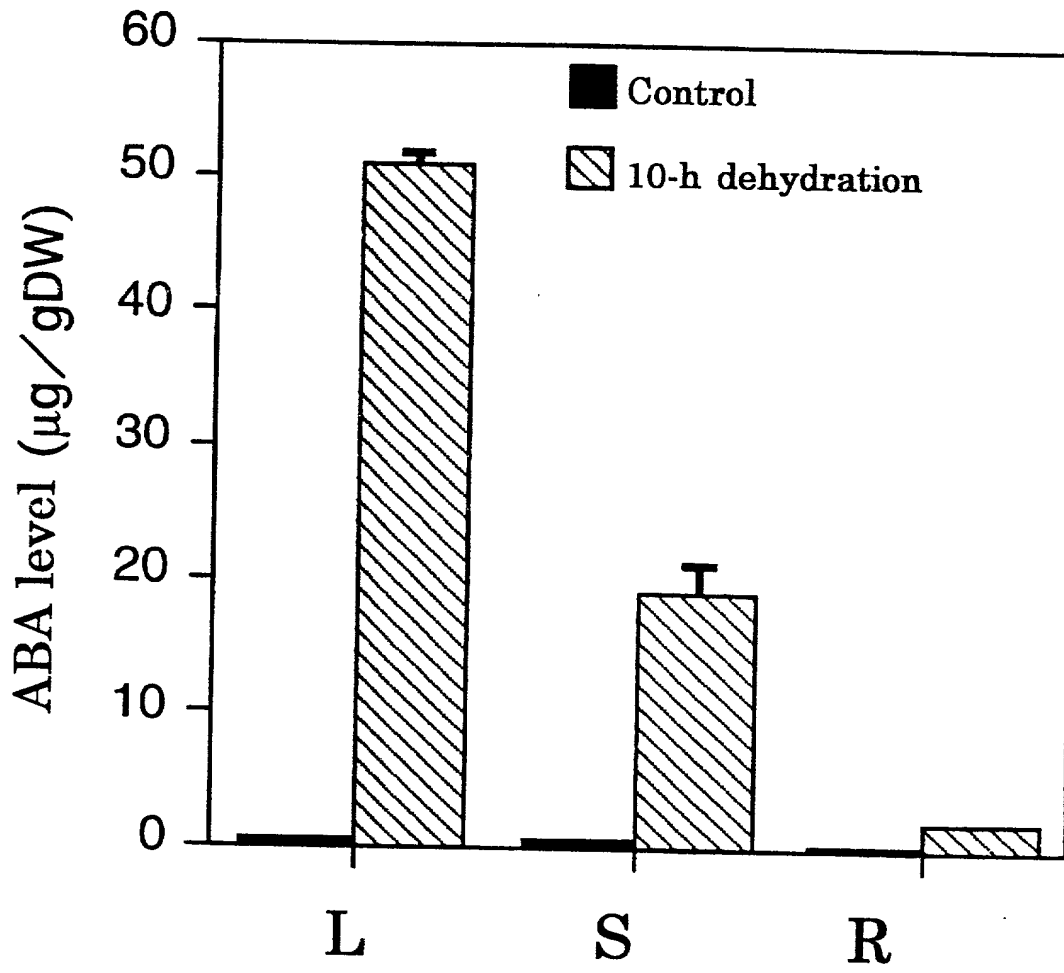


Figure 9

AtNCED3	MAS-----FTATAAVSG-RWLGGNHTQP---PLSSSCSSDLSVCS--SL-PMASRVTRKLNVSALHTPPALH	61
CPRD65	MPSSASNTWFNATLPSPPFKQLPSTSSPTNLLPLRKTSSTNTITCSLQTLHHPKQYQRTSTSTATTITPTPIK	75
AtNCED3	FKQSSNSPAIVVKPL--KAKESNTKQMLFQAAAAALDAAEGLVSHEKLHPLPKTADPSVQIAGNFAPVNEQP	134
CPRD65	TTTTTTTTPPRETNP-SDTNQPLPQKNFLQAAAAALDLVETALVSHERKHPLPKTADPRVQIAGNFAPVHEHA	150
AtNCED3	VRRNLPVVGKLPDSINGVYVRNGANPLIEPVIGHHFFDGDGMVHAVKFEHGEASYACRFDTIRFVQERQLGRPVI	209
CPRD65	ADQGLPVVGKLPKCIDGVYVRNGANPLIEPVIGHHFFDGDGMVHAVKFTNGGEASYACRFETIRLSQEKSLGRPVI	225
AtNCED3	FPKATGELHGHGTIARLLFYARAAAGLVDPAGTGIVANAGLVYFNGHLLAMSEDDLPHYVQITPNGDLITVGRF	284
CPRD65	FPKATGELHGHGTIARLLFYARGLFGLVDGSGGIVANAGLVYFNNHLLAMSEDDLPHYVRIITPNGDLITVGRY	300
AtNCED3	DFNGQLSTMTAHPKMDPSGELHALSYDVVSKPYLKYFRFSPDGKSPDVEIQLDPTMHDFAITENFVVVPD	359
CPRD65	DFNGQLSTMTAHPKMDPVGGLHALSYDVVQKPYLKYFRFSPDGKSPDVEIQLKEPTMHDFAITENFVVVPD	375
AtNCED3	QQVFKLHEMIGGSPVYDKNKVARFGILDKYABSSNIKWIDAPDCFCFHLWNAWEEPETIEVVIGSCMTPP	434
CPRD65	QQVFKLHEMIGGSPVYDKNKTSRFGILDKYADANAMRWIDAPDCFCFHLWNAWEEPETIEVVIGSCMTPA	450
AtNCED3	DSIFNESDENLKSVLSEIRLNLKTGSTRRPIISNEQDVNLEAGVNRNMLGRKTFAYLALAEPWPKVSGFAK	509
CPRD65	DSIFNESDENLKSVLSEIRLNLKTGSTRRPIISDAEQDVNLEAGVNRNMLGRKTFAYLALAEPWPKVSGFAK	524
AtNCED3	VDLITGEVKKHLYGDNRYGGGEPLFLPGEGGEDEGYILFVHDEKMKSELOIYNAVSLVEATVKLPSRVPYGF	584
CPRD65	VDLITGEVKKMYGEEKFGGEPLFLPNGQEDDEGYILFVHDEKMKSELOIYNAONLLEASIKLPSRVPYGF	598
AtNCED3	HGTFIGADDLAKQVV	599
CPRD65	HGTFIHSDLLKQA-	612

Figure 10

AtNCD1	M/SL-LTMPMS---GGIKTMPQ---AQ-IDLGF-RPTIKRQPKV-----TKCTVOIDVTELTKGRQLFTRPTTAT	60
AtNCD2	MDSVSSSSFLS---STFSLHHS---LLRRSSSPTLRLNSAW---EERSPTINPSONDRNKPKTLHNRT	64
AtNCD3	MSFTATAAVSGRMLGNHTQPLSSSQSSDLSYCSLPMASRVTRKLNSSALHTPPALHFPKQSSNSPATVVK	75
AtNCD4	MA-----EKLSDGS-----TTSVHPRPS-----	19
AtNCD5	MQHSRLSDLLPTKTSFRSHLLPOPKNANISRRLLNPFKIPTLPDLTSPVPSPVKLKPTYPNLNLLQKLAATMLD	75
AtNCD1	P---POHNPLRLNIFQKAAATAIDAAERALTSHEQDSPLPKTADPRVQTAGNYSVPVPESSVRRL--TVETIDPCI	132
AtNCD2	NHTLVSSPPKLRPEMTLATALFTTVEDVINTFIDPPSRP-SVDPKHMLSDNFAPVLDLPPTDCETIHGILPISL	138
AtNCD3	PKAKESNTKQMLFQRAAAAAADAAEGFLVSHKHLPLPKTADPSVQTAGNFAPVNEQVRRNL--PWVKLPDSI	149
AtNCD4	-----KGF---SSKLLDLRLRLVVKLMDASLPHY-----LSGNFAPIRDETTPVKDLPVHGFUECL	75
AtNCD5	KTESSIVIPMEQNRPLPKPTDPAVQLSGNFAPVNECPVQNG-----LEVMQDIESCL	127
AtNCD1	DGYIRNGNMFLEPTAGHLFDGDMFAVKIT-NGSASYACRFNTIRLVCEKRLGRPVFPKATIGELHGS-G	205
AtNCD2	NGAYIRNGNDFLPRGPYHLFDGDMFAVKIT-NGKATLCRAVKTYKYNMEKOTIGAPVMPWFSGFNGTAS	212
AtNCD3	KGYIRNGNDFLEPTAGHLFDGDMFAVKIT-NGSASYACRFNTIRLVCEKRLGRPVFPKATIGELHGT-G	222
AtNCD4	NGEYIRNGNDFKFDVAGYHFDGDMFAVKIT-DGKATYSRAVTRIRLVCEKRLGRPVFPKATIGELHGT-G	147
AtNCD5	KGYIRNGNMFLEPTAGHLFDGDMFAVKIT-NGKATYSRAVTRIRLVCEKRLGRPVFPKATIGELHGS-G	201
AtNCD1	IARLMFYARGLCGLINNGMGANAGLVYFNRLAISELDLPYDKETOTGLQTHGRYDFDGKLSAMTAH	280
AtNCD2	VARGALTAARVLTGOYNPANGGLANSELAFFSNRFALGEEDLPYAVRLTESGULETHGRYDFDGKLSAMTAH	287
AtNCD3	IARLMFYARAAAGLVDPAGGLGAGNAGLVYFNRLAISELDLPYDVOETPNGLKTYGRDFDGKLESTMTAH	297
AtNCD4	LLMNEQQLRTKLKLDNTYNGGTANTALVYHGLALCENEPYVAVLEIGLQTHGLDYEKRLTHSFIAH	222
AtNCD5	LARLAETARAGLGLVDGTRGAGNAGLVYFNRLAISELDLPYDKIDGGLTHGRFGEEDQDSSVIAH	276
AtNCD1	PKIDPVTKEHALSYDVVKPMLKYRFSPDGKSPLETT-PLETPTMIDFAITENFWWIPDQWFKLGEM--	352
AtNCD2	PKIDPITGETFAFRYPV-PPHLYIRFDSAGKORDVET-SMTSPFLHDFAITRHAIFAETOLGVRMMLDL	361
AtNCD3	PKIDPESGELFALSYDVSKPMLKYRFSPDGKSPVETI-QLDPTMMHDEAITENFWWIPDQWFKLPEM--	369
AtNCD4	PKIDPVTGEMFTFGYS-HITPMLIYRVTSKGIMDPVETI-TISEPTMMHDEAITETATFMDLPMHFRPKEM--	293
AtNCD5	PKIDATTGDLHTLSYNLKNPMLKYRFNTGKKTROVETI-TLPEPTMIDFAITENFWWIPDQWFKLSEM--	348
AtNCD1	TSQKSPV-VFDGKVSRLGMPKDATEASQILNNSPETFCFLNNAWSPETEE---IV---VIGSOMSPADSI	420
AtNCD2	VLEGGSPVGTDNCKITRUGVIPKYAGDESEMNFVEVPGFNLIHAIWDEDDGNS---W---LTAPNIMSIEHT	430
AtNCD3	IRGGSVP-VYDQNKVARGGLDKYAEDESSNDQNDAPDCFLNNAWSPETDE---W---VIGSOMTPPDSI	437
AtNCD4	VKEKMIYSFDPTIKARHGLFRYAKDELMIRNFEINCFIFHNAWSEDE---WLTICRLNPOLDWVSGK	365
AtNCD5	IRGGSVP-IYVKEKVARHGLSKQDLTGSQDNLVMPDCFLNNAWSEERTTEGDPVIV---VIGSOMSPDITI	419
AtNCD1	FNEIDESLRSVLSEIRINLRTRKTRRSLV--NEDVNLIEGW-NRNLGRKTRFAFLAAYPMKVSQFAKVD	492
AtNCD2	L-ERMOLVHALVEKVKIDLVTLVRRHPTSA-----RNLDFAVI-NPAFLGRCSRYVYAAIGDPMFKLSGVAKLD	498
AtNCD3	FNEIDENLKSVLSEIRINLKTGSTRRPITTSNEDQVNLFAGW-NRNLGRKTKFAYLALAEPMKVSQFAKVD	511
AtNCD4	VKEKLENGNELYEMRFNMKTSASQKLSASAVDFPRINECYTGKQRYVYGTILDSTAKVTGLIKFDLHAEAE	440
AtNCD5	FSEGEPTRVLESEIRINLRTRKTRRSLV--GNLEAGHI-NRSYVGRKSQFYVYATADPMKVSQFAKVD	489
AtNCD1	LCTGEMKKYIYGGEKYG-G-EPFFLPQN--SGNGEENEDGYIFCHVDETKISELOTINAVNLKLE--ATIK	560
AtNCD2	VSKGDRDDCTVARMYSGCYGGEFFVARDPGNPEAEEDGYVVTWDEVTGESKFLVMAKSPELTAAR	573
AtNCD3	LTTGEVKIHLYGDNRYG-G-EPLFLPGE--GGEDE---GYELCFVDECTNKSLOQVNAVSLEVE--ATVK	575
AtNCD4	TGRMLEVGGNQIGLYBLG--EGRYGSEAIYVPRETAEDDGYLTFVHDEITGKSEVTVIAKTSAPVAIVE	513
AtNCD5	IQNGTVSEFNYPGSRFG-G-EPCVPEG--EGEEDK--GYMGVHDEKDESEFVWVATDMKV--AAVR	553
AtNCD1	LPKRPYGFHGTIFDSNELVDL--	583
AtNCD2	LPKRPYGFHGTIFKESDLNKL--	595
AtNCD3	LPKRPYGFHGTIFGADLAKO-W	599
AtNCD4	LPKRPYGFHGTIFTEOLDQTLT	538
AtNCD5	LPKRPYGFHGTIFYSENQLKEQ-VF	577

Figure 11

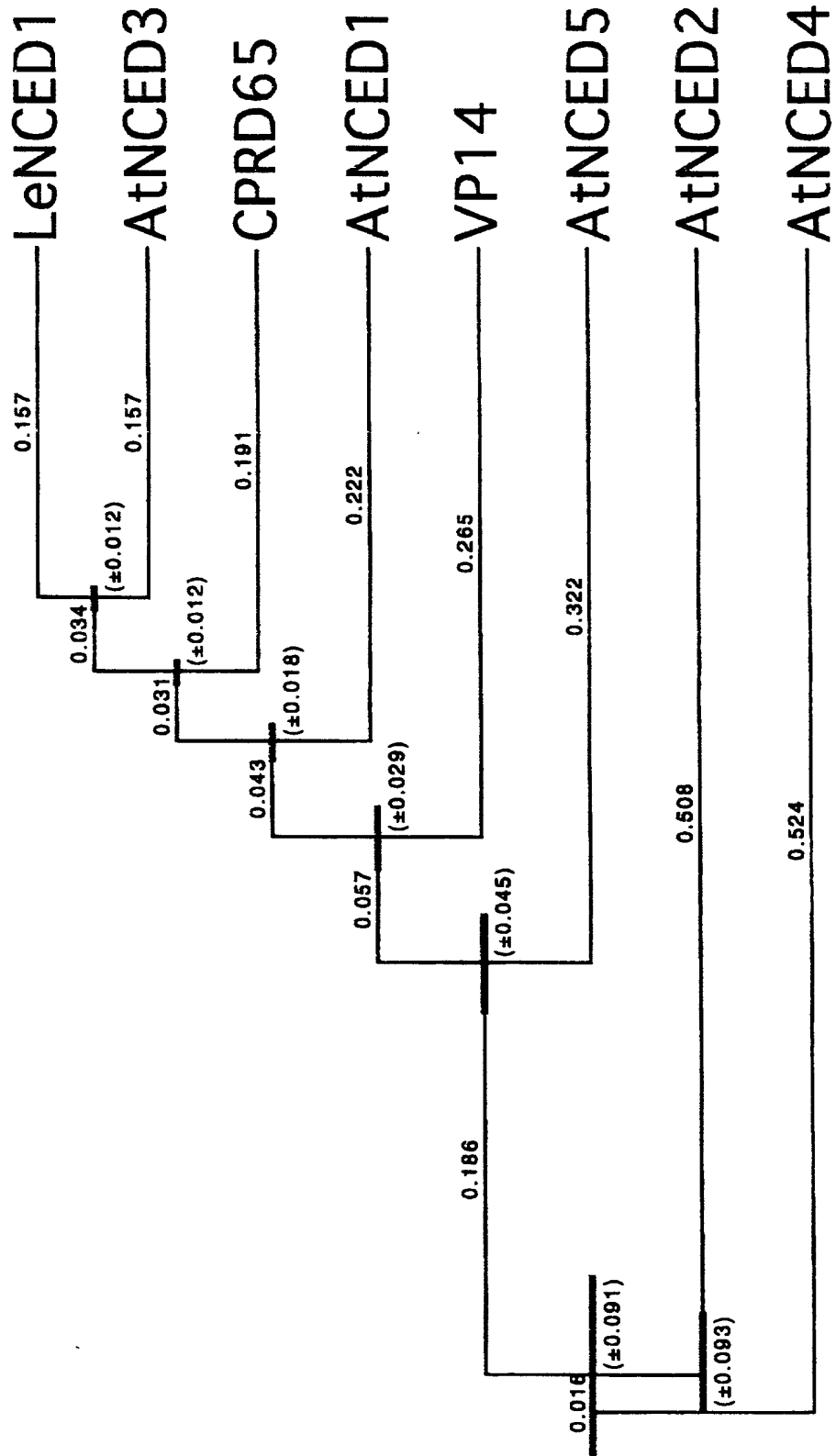


Figure 12

11/15

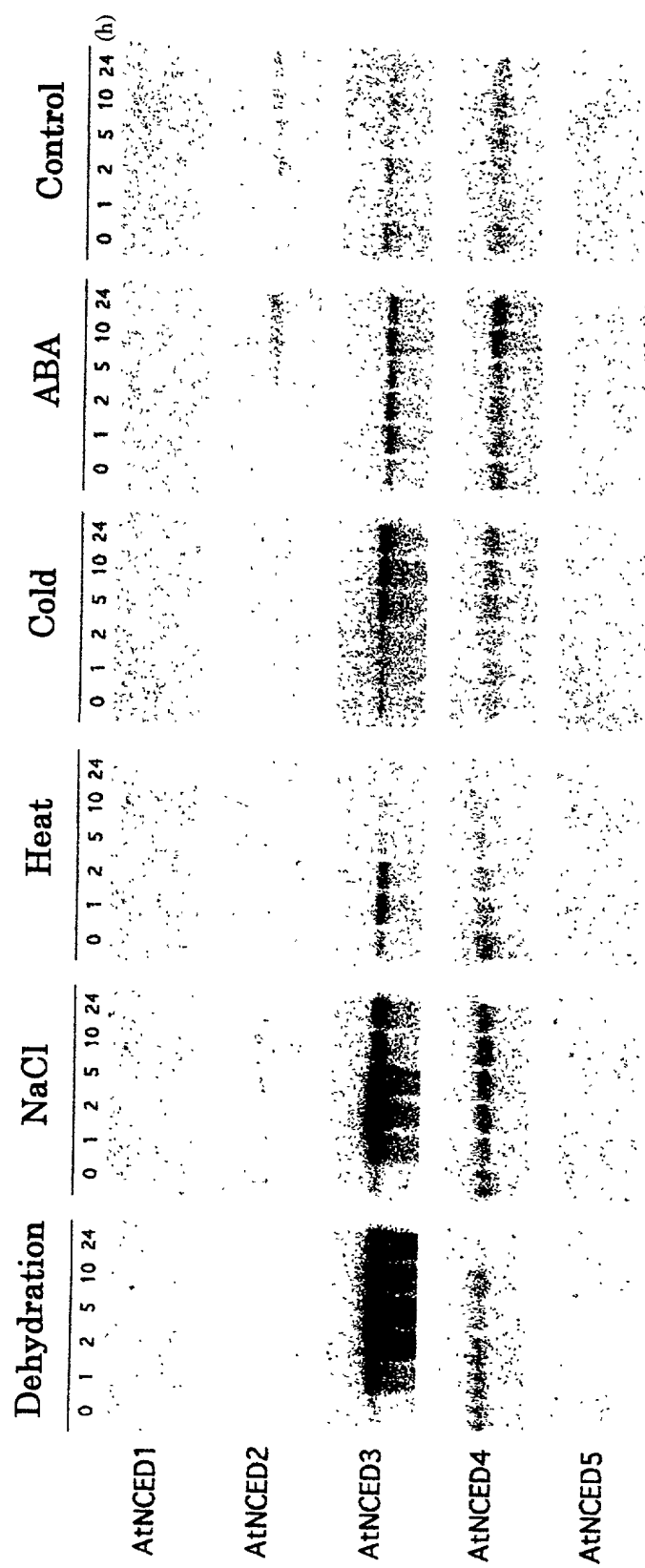


Figure 13

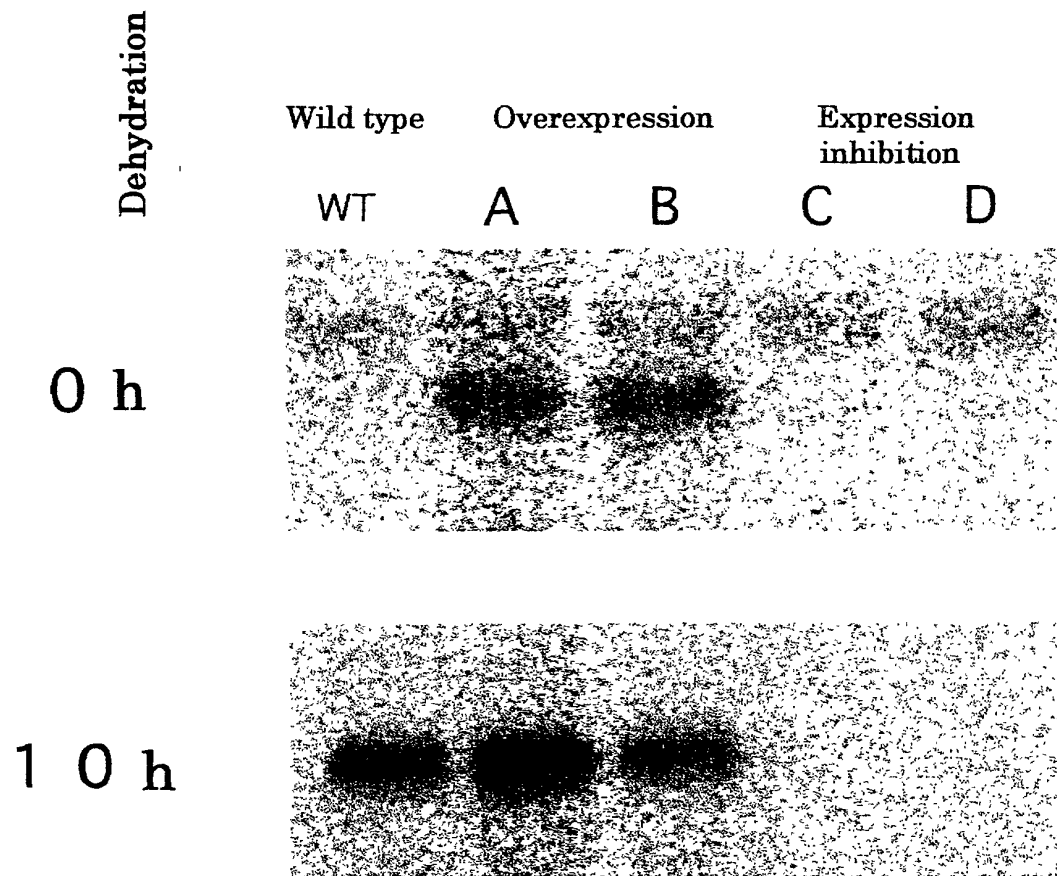


Figure 14

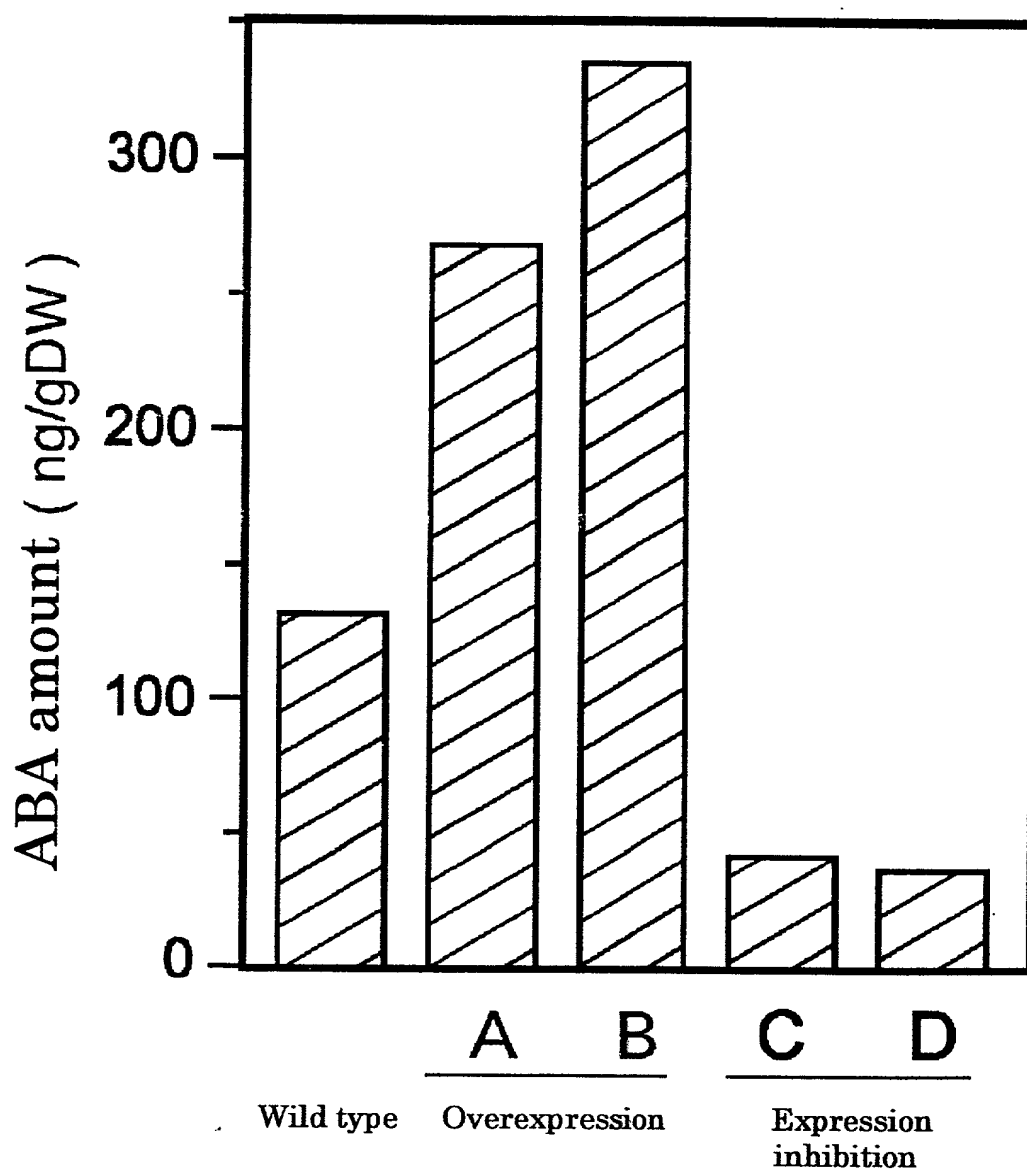
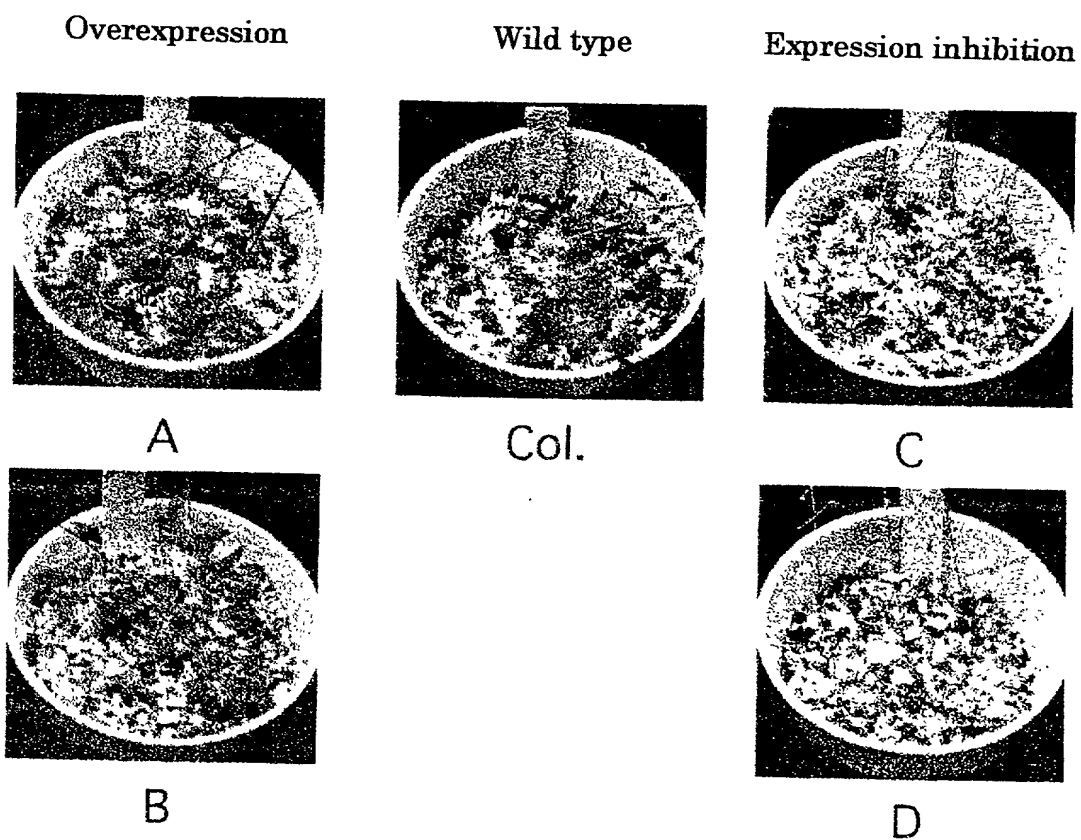


Figure 15

14/15



Water content of plants
14 days after tolerance evaluation

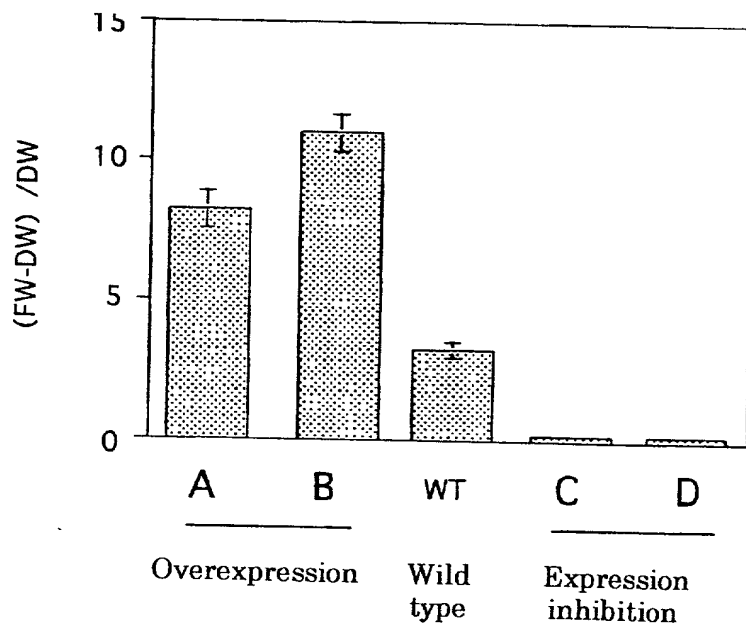


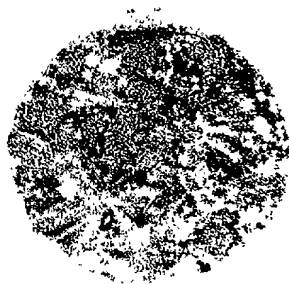
Figure 16

15/15

Overexpression

Wild type

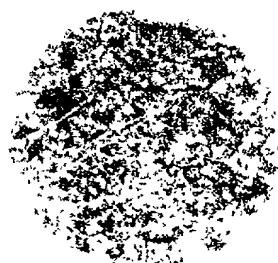
Expression
inhibition



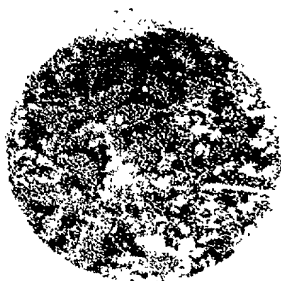
A



Col.



C



B



D

09758269 011201
T0277D 6928560